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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,  
CENTRAL AMERICA, 15 JULY 1975

K. J. Hill, et al

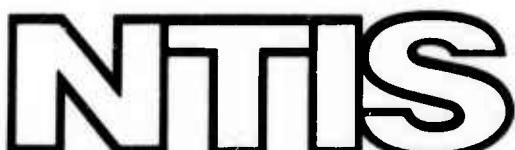
Teledyne Geotech

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13 January 1976

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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT**  
**Central America, 15 July 1975**

**K.J. Hill, M.S. Dawkins, R.R. Baumstark, and M.O. Gillispie**  
**Alexandria Laboratories**  
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**January 1976**

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**312 Montgomery Street, Alexandria, Virginia 22314**

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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SDCS EVENT REPORT NO. 54

Central America, 15 July 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	$m_b$	$M_s$
NORSAR	16:06:29.4	15:53:44	05 N	083 W	5.3	N/A
Hagfors	16:06:36.2	15:53:53	06 N	079 W	5.2	4.8

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

15:53:51.5 07.7N 083.4W 5.1 5.1

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at CPSO, HN-ME, RK-ON, FN-WV, NORSAR and LASA. WH2YK short-period data were not recoverable because the station tape recorder was inoperative. Horizontal SP channels at CPSO, HN-ME, RK-ON, and FN-WV were rotated.

Long-period signals were recorded at CPSO, RK-ON, FN-WV, and LASA. WH2YK long-period data were not recoverable because the station tape recorder was inoperative. Horizontal LP channels at CPSO, RK-ON and FN-WV were rotated. ALPA and NORSAR long-period array data were not recoverable. LASA long-period array data are recoverable in segment lengths of 6 minutes 40 seconds; three segments are included in this report.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

## STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES			ELEVATION METERS	INSTRUMENTATION	
		DEG	MIN	SECS		SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65	14	00.0	N	626	None
		147	44	36.0	W		31300
CPSO	McMinnville, Tennessee	35	35	41.4	N	574	6480 V
		085	34	13.5	W		SL210 V
FN-WV	Franklin, West Virginia	38	32	58.0	N	910	7515 H
		079	30	47.0	W		SL220 H
LASSA	Billings, Montana	46	41	19.0	N	744	KS36000
		106	13	20.0	W		KS36000
HN-ME	Houlton, Maine	46	09	43.0	N	213	HS10
		067	59	09.0	W		7505A V
NORSAR	Kjeller, Norway	60	49	25.4	N	379	8700C H
		010	49	56.5	E		SL210 V
RK-ON	Red Lake, Ontario	50	50	20.0	N	366	SL220 H
		093	40	20.0	W		SL210 V
WH2YK	White Horse, Yukon	60	41	41.0	N	853	SL220 H
		134	58	02.0	W		SL210 V

Note: The orientation of the radial instruments at FN-WV is assumed to be  $316^\circ + 5^\circ$  based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

# HYPOCENTER DETERMINATION

INPUT FOR EVENT                    15 JUL 75  
 15:54:30.0      7.000N      84.000W      0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST	REST	REST
CPC	15 59 40.0	-3.7	-2.1	27.8	356.2
FM-WV	16 00 09.9	-1.1	0.5	30.9	5.9
HM-ME	16 01 33.1	-0.4	1.2	40.6	16.5
LAC	16 01 57.1	-0.6	0.9	43.5	337.2
RK-ON	16 01 58.9	-1.4	0.1	43.8	350.6
NAC	16 06 29.4	-1.8	-0.6	85.4	29.4

## 67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA	
NC CONVERGENCE	CN	CAIC	RUN				
15:54:12.4	8.166N	83.376W	132.	CAIC	1.2	16	6
15:53:51.5	7.696N	83.369W	0.	REST	1.2	3	6

CAIC	REST
3 . 3	3 . 3
0 . 0 0	0 . 0 0
0 . 0 0 0	0 . 0 0 0
0 . 0 0	0 . 0 0
0 . 0	0 . 0

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF. LEVEL, SDV= 1.18  
 MAJOR      97.5KM. MINOR      61.0KM. AZ=      27 AREA=      18695 SQ.KM. REST

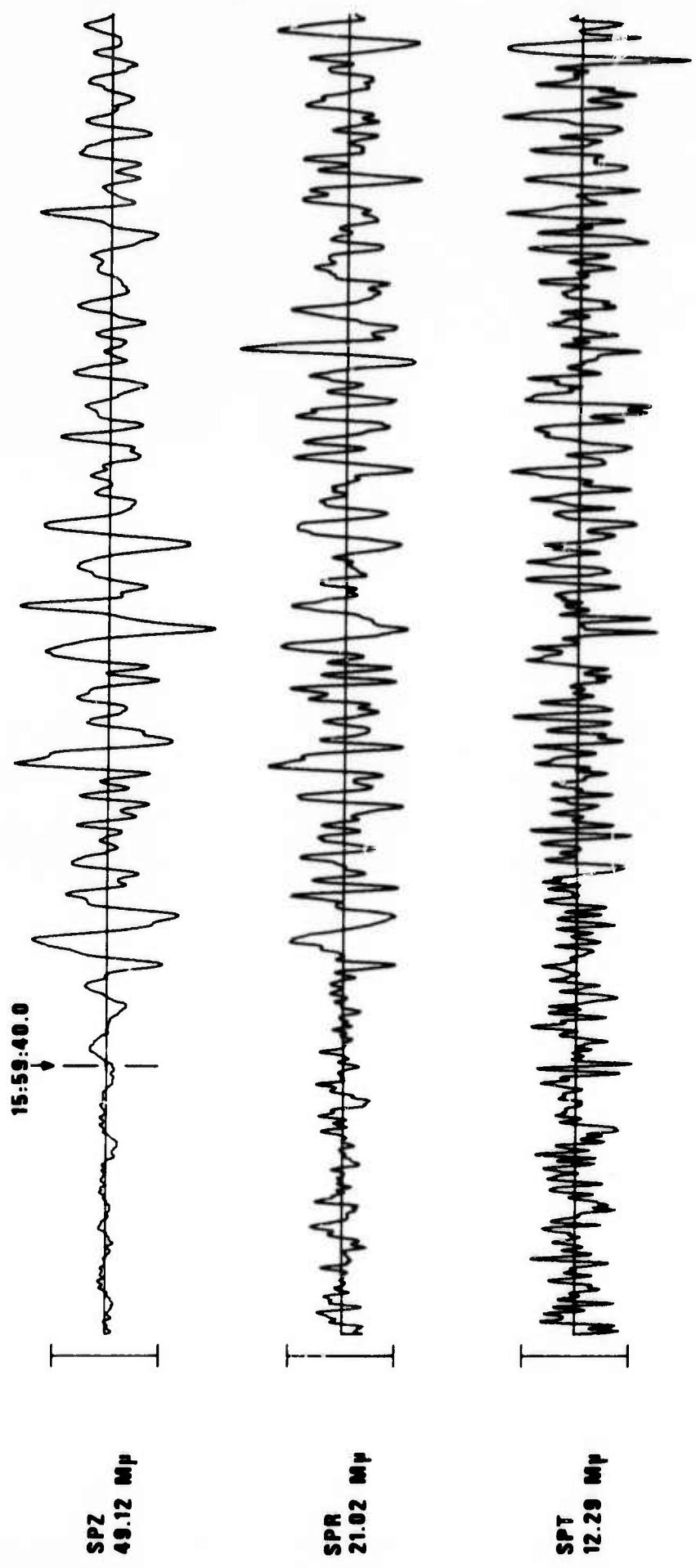
## DATA SUMMARY

INPUT FOR EVENT                    15 JUL 75  
 15:54:30.0                    7.000N                    84.000W                    0RM.

STA.	PHASE	ARRIVAL			INST	PER	A/T	MAGNITUDE			DIST
		TIME	HR	MIN				MP	MS	DIF	
CFC	EP	15	59	40.0	SFZ	1.9	150.	5.46			27.8
CFC	IQ	16	10	17.0	IPT	19.0	510.				
CFC	LR	16	11	41.0	IPZ	18.0	327.		5.08		27.8
FM-WV	EP	16	00	09.9	SFZ	1.2	32.	4.90			30.9
FM-WV	IQ	16	11	42.0	LPT	19.0	747.				
FM-WV	LR	16	14	53.0	IPZ	18.0	463.		5.28		30.9
HN-MI	EP	16	01	33.1	SFZ	0.8	15.	4.33			40.6
IAC	EP	16	01	57.1	SAP	0.9	89.	5.15			43.5
IAC	LR	16	22	55.0	IPZ	21.0	254.		5.16		43.5
RK-CN	EP	16	01	58.9	SPZ	1.0	83.	5.12			43.8
RK-CN	IQ	16	19	00.0	LPT	20.0	260.				
RK-ON	LR	16	21	59.0	IPZ	20.0	154.		4.95		43.8
WAC	EP	16	06	29.4	AB	1.2	57.	5.42			85.4

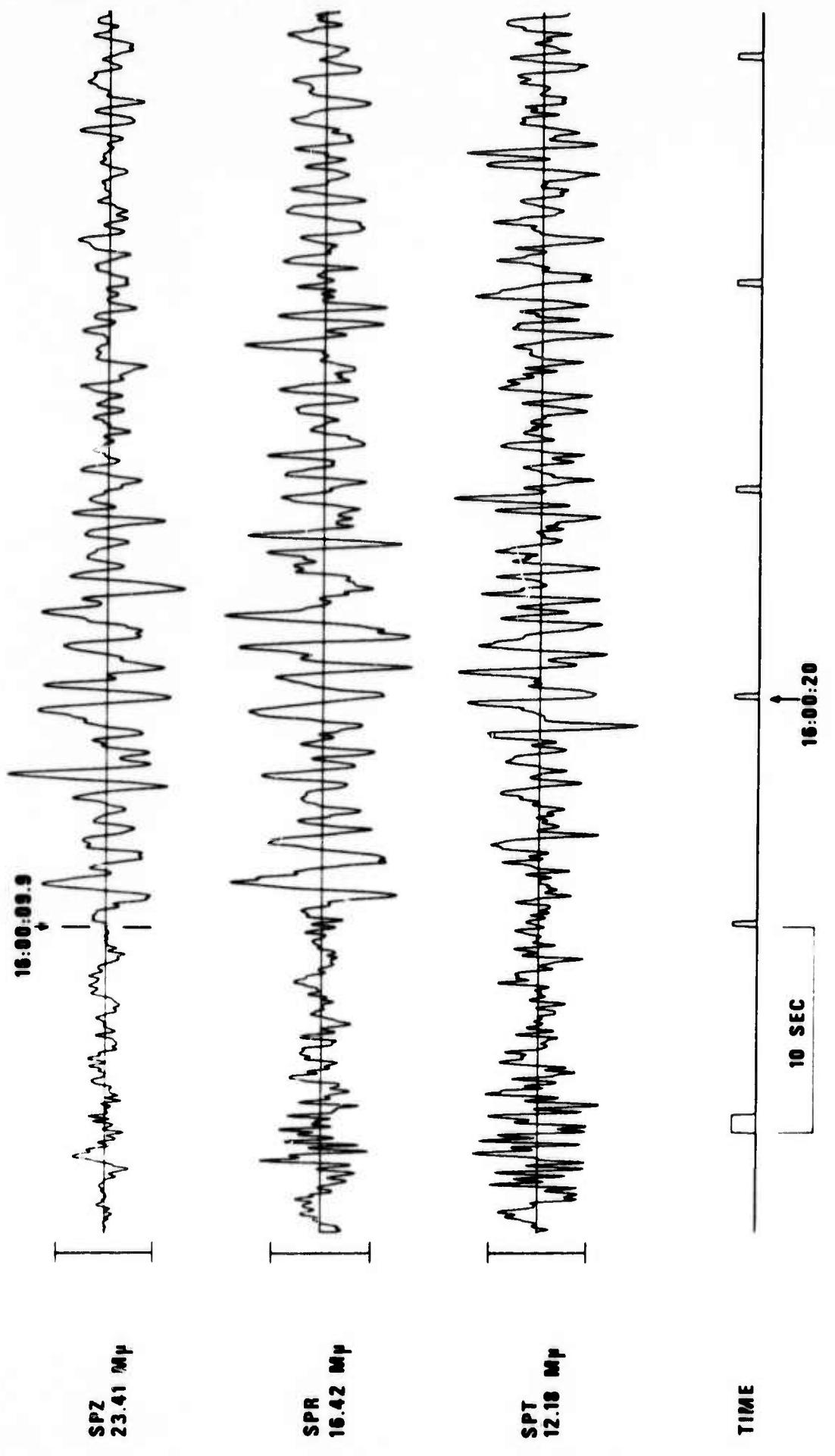
ORIGIN	IAT.	ICNG.	DEPTH (KM)	MAG	SDV	STA	LP MAG	LP SDV	LP STA
15:53:51.5	7.696N	83.369W	0. REST	5.06	0.41	6	5.12	0.1	4

CPSO 15 JUL 75



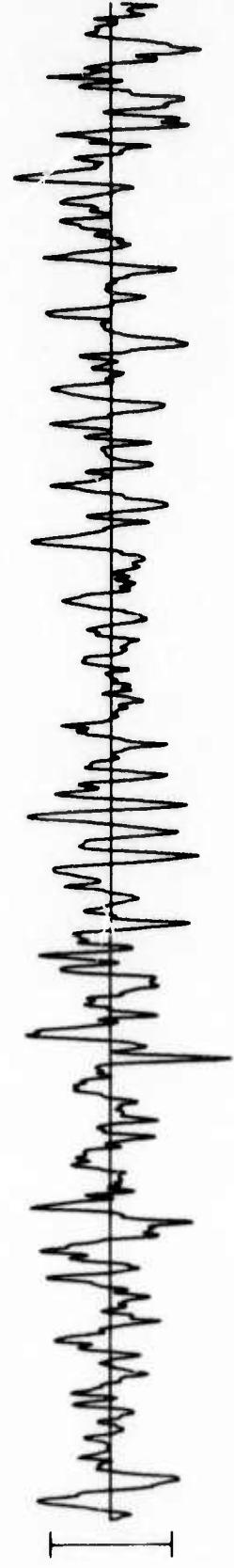
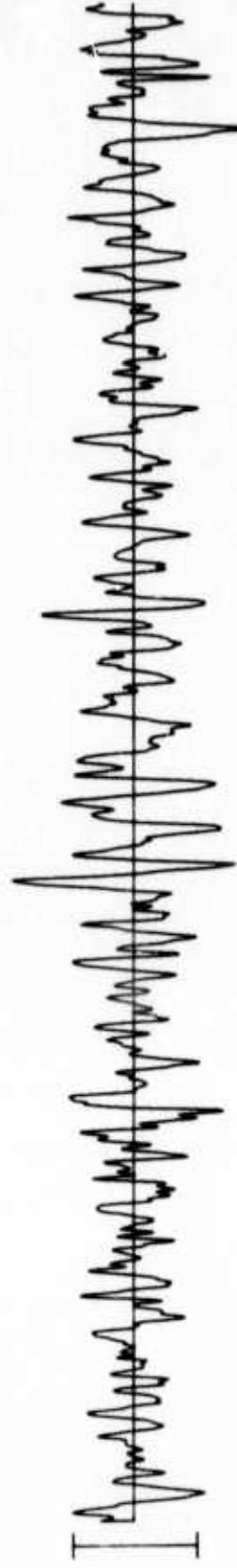
5<

FN-WV 15 JUL 75



HN-ME 15 JUL 74

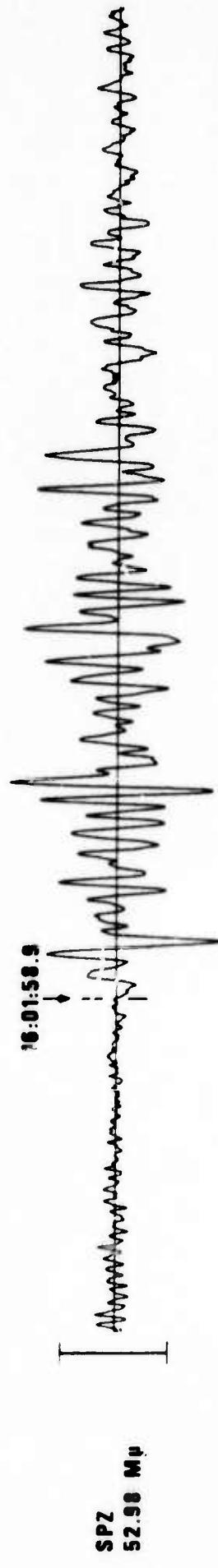
16:01:33.1



10 SEC

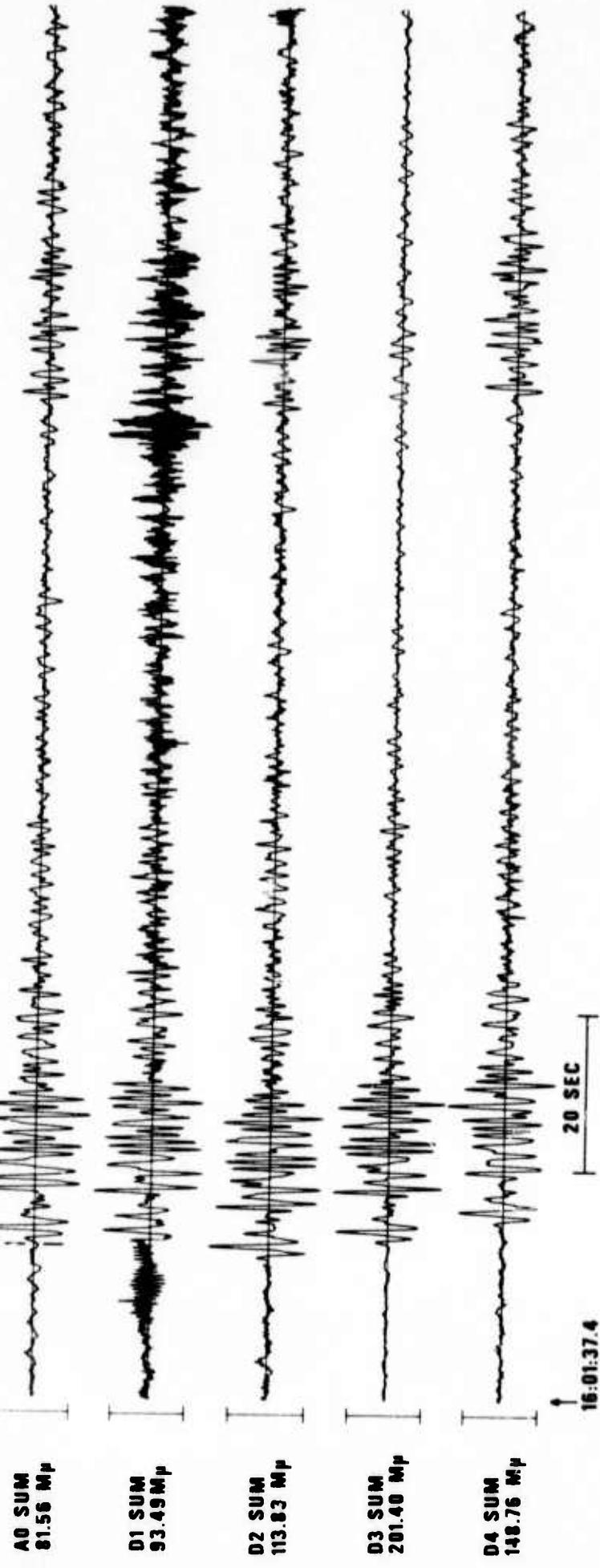
2

RK-ON 15 JUL 75



LASA INFINITE VELOCITY SUBARRAY SUMS 15 JUL 75

16:01:57.1



9<

## NORSAR EVENT FILE

1975 JUL 15

EPX NO. 28860 ARR. 16.6.30.0 4.1N 83.7W 5.0MB 33KM

DIST = 88.6 AZI = 275.9 AMP = 13.0 PER = 1.2

[---] = 5 SECONDS

AB

ARRIVAL TIME



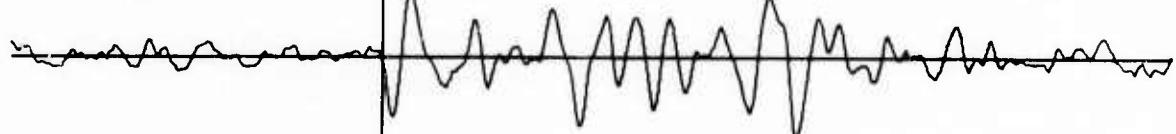
SAB

1A



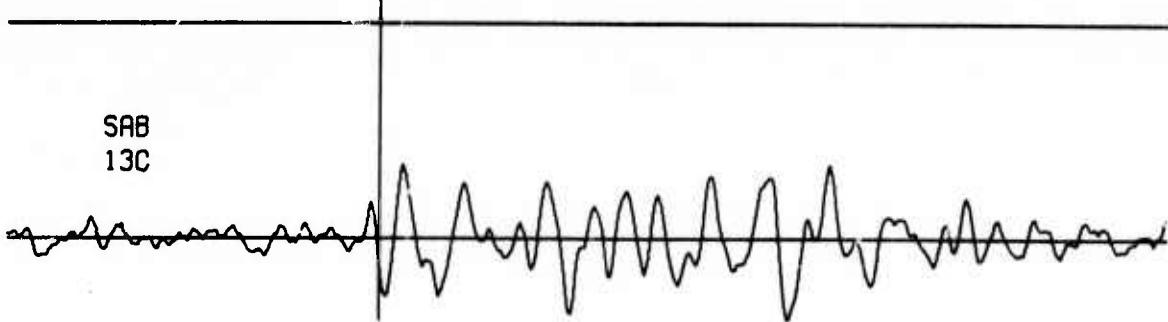
SAB

3C



SAB

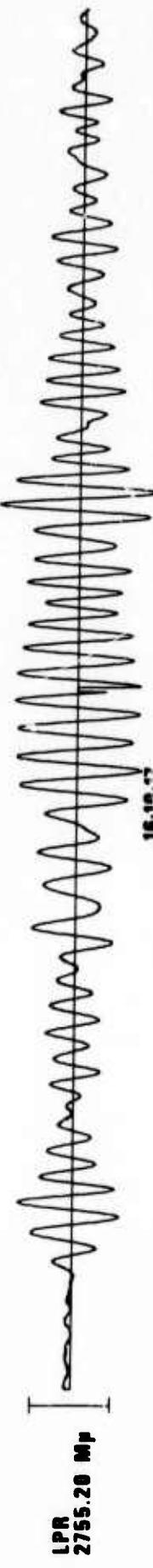
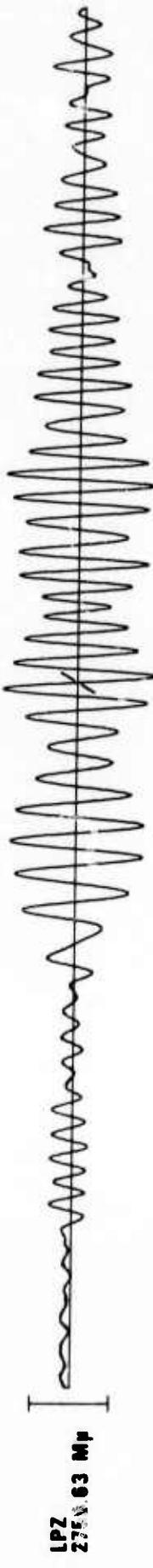
7C



10&lt;

CPSO 15 JUL 75

16:11:41

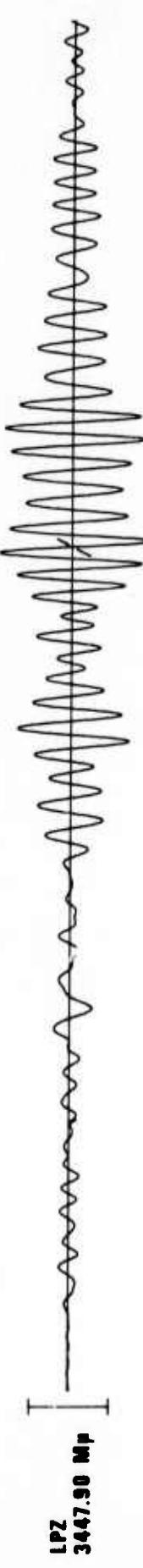


16:10:00

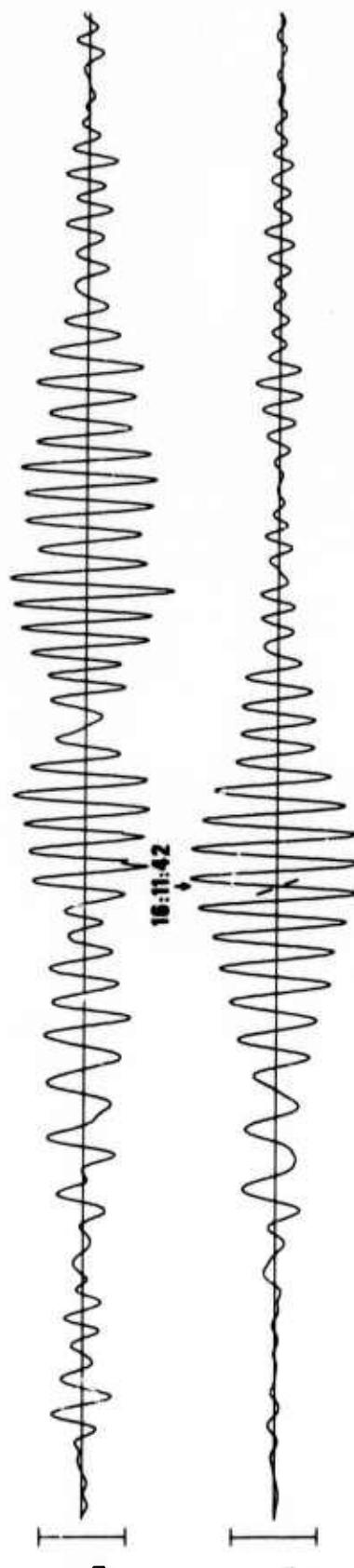
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FN-WV 15 JUL 75

16:14:53

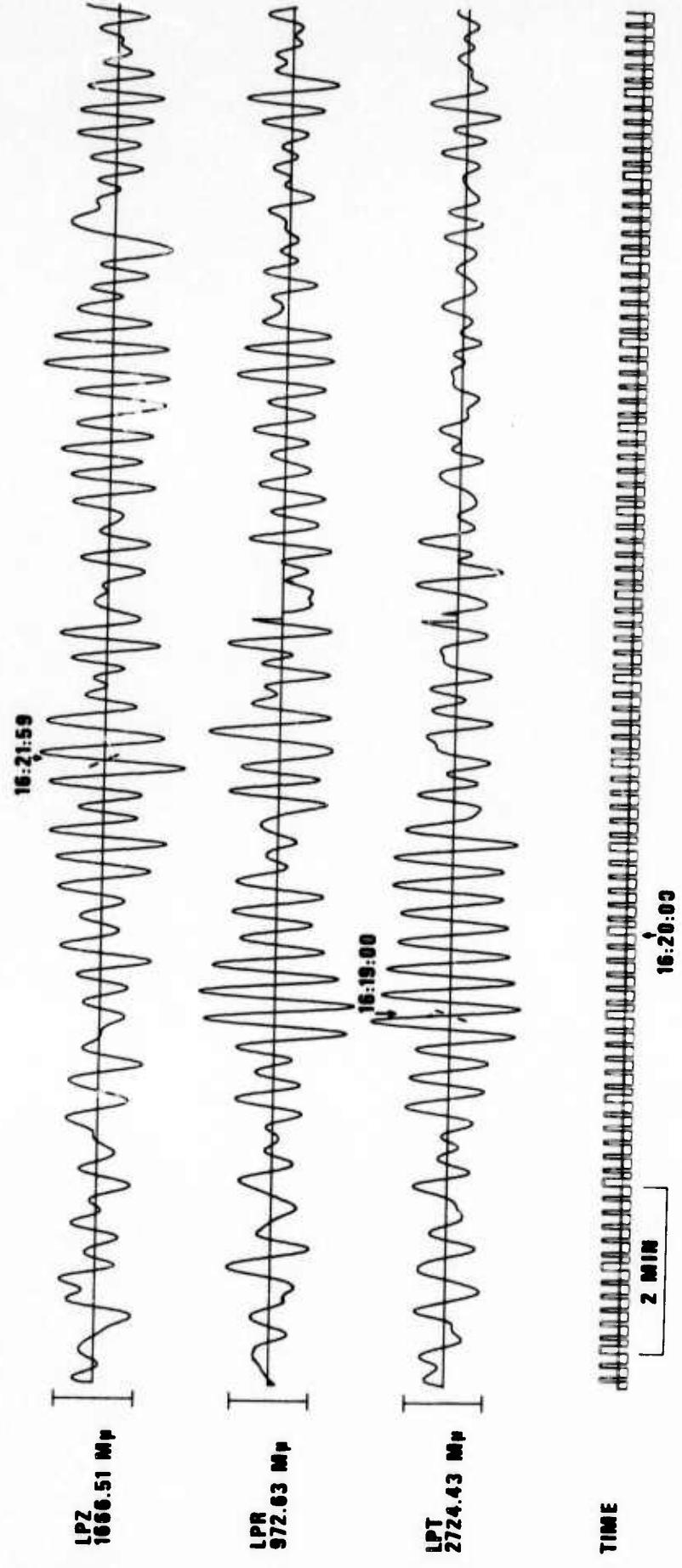


LPT 2503.02 MHz  
615.52 MHz



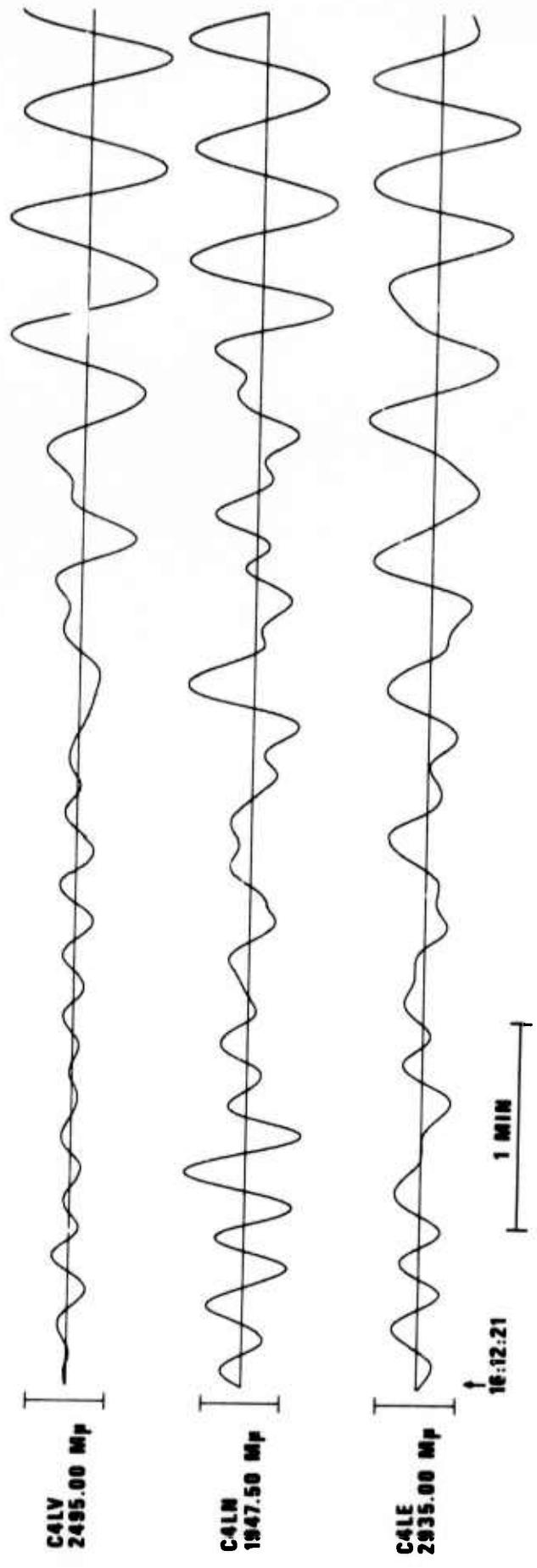
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RK-0N 15 JUL 75

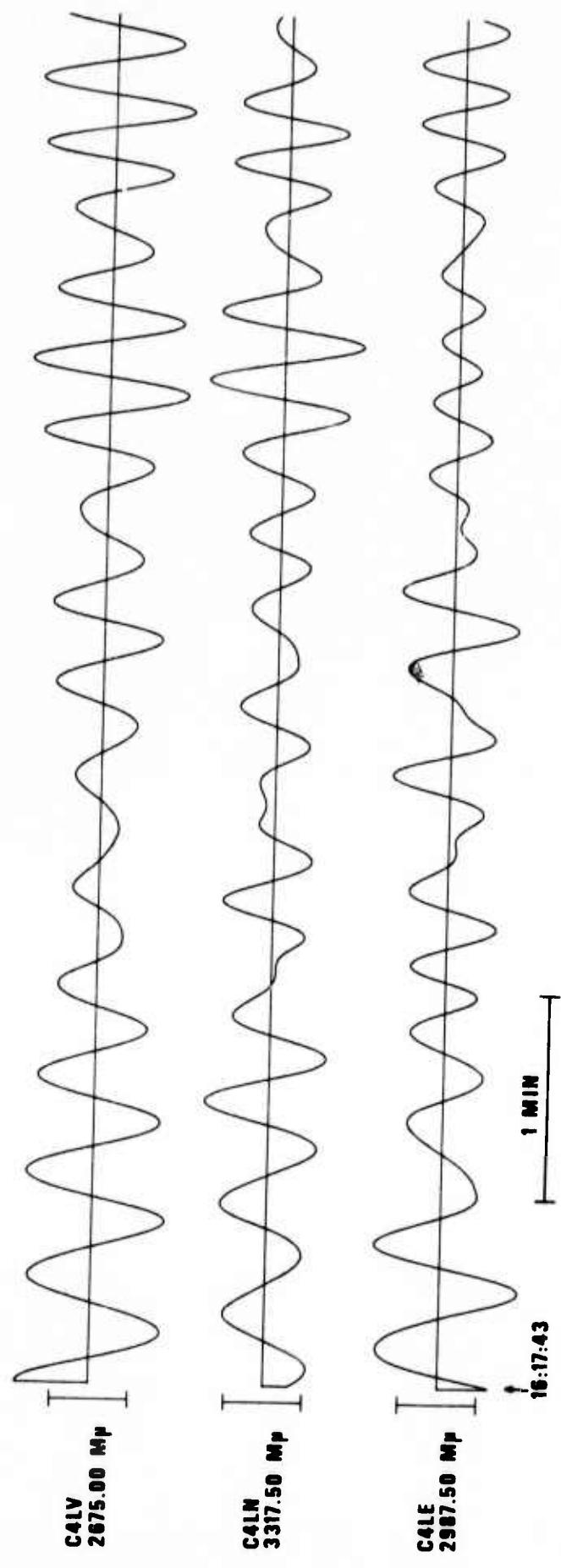


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LASA LONG PERIOD C4 SUBARRAY (SEGMENT 1) 15 JUL 75



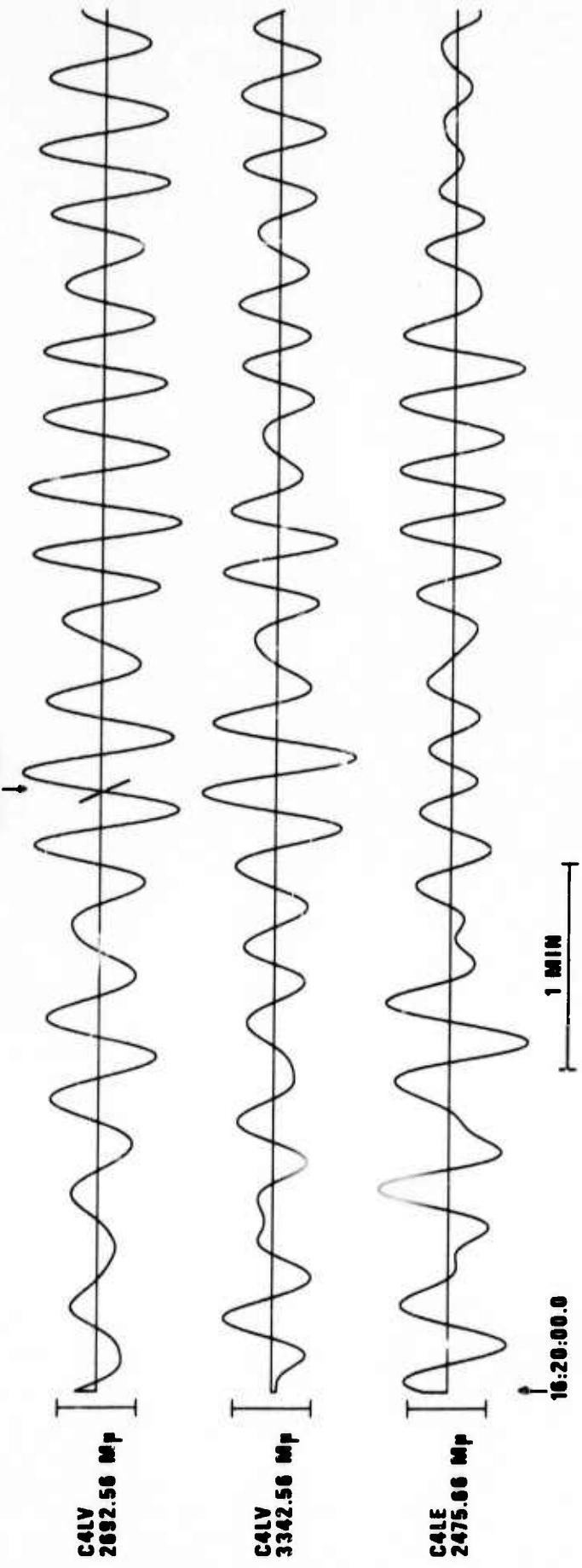
LASA LONG PERIOD C4 SUBARRAY (SEGMENT 2) 15 JUL 75



15<

LASA LONG PERIOD C4 SUBARRAY (SEGMENT 3) 15 JUL 75

16:22:55



16<